

canals'') of the charged marsupium of the *Anodontinae* as a special device for aëration, not of the embryos, as I believe, but of the blood of the gravid female, the mother. Their argument is, that it is hard to see that a canal shut off from the embryos by a membrane could increase the facilities of aëration. I think, this argument rests upon a complete misunderstanding of the requirements and actual conditions; a canal, which permits a circulation of water within the gill, although separated from the embryos by a thin membrane, surely gives a better chance for aëration of the embryos, than the complete absence of such a canal, and, consequently, the complete absence of any water circulation within the marsupial gill. The mass of embryos inside of the water tubes is of such a character, that it would completely choke up the ostia, and there would be only a water current over the outer faces of the gill, separated from the embryos by the whole thickness of the gill-lamina, which is considerable. For this reason, I emphatically must maintain my first opinion, that the lateral water tubes have the function of furnishing breathing water for the embryos and glochidia, and not for the mother.

(To be continued.)

A. C. BILLUPS.

Mr. A. C. Billups died early in June at his home in Lawrenceburg, Indiana. He was known to conchologists as an ardent collector of shells, his chief interest being in fresh-water species. Besides his conchological work, Mr. Billups was known as an entomologist, a pursuit in which he took especial delight and satisfaction. In his business as a mechanical engineer, Mr. Billups traveled extensively for a time, installing power plants of various kinds; and this gave many opportunities for collecting in those branches of natural history which interested him. It also gave opportunities for personal intercourse with brother naturalists, many of whom will hear of his death with sincere sorrow. Mr. Billups is survived by his wife and son, Mr. C. F. Billups.

NOTES.

MR. T. VAN HYNING has recently been appointed Librarian of the Experimental Station, and Director of the Museum of the Florida State University; his address is now, Florida State University, Gainesville, Florida.

MODIOLUS DEMISSUS Dillw. and var. GRANOSISSIMUS Sby.—Dr. Dall, in the Trans. Wagner Inst., iii, 796, 797, has pointed out that *Modiola plicatula* Lam. (An. s. Vert., vi, 1819, p. 113) is preceded by *Mytilus demissus* Dillw., Descr. Cat. Rec. Shells, Vol. I, 1817, p. 314, described from Virginia and Carolina. He suggests using the name *demissa* for the southern form with beaded sculpture, and *plicatula* for the northern specimens with smoother ribs. All the examples from the Carolinas loaned to me by Mr. Mazyek were the same as the northern specimens; so, unless the beaded form actually is also found in Carolina, the name *granosissima* Sowerby (Proc. Mal. Soc. London, xi, 1914, p. 9) from Andaras, S. America, and Florida, will have to be used for the Florida beaded variety. *M. plicatula* will then become a synonym of *demissa* Dillw.—E. G. VANATTA.

PUBLICATIONS RECEIVED.

ON THE ANATOMY OF CONUS TULIPA LINN, AND CONUS TEXTILE LINN. By H. O. N. Shaw (The Quarterly Journal of Microscopical Science, Vol. 60, pt. 1, pp. 1-60, April, 1914). A clear and concise account of the anatomy of these two interesting shells, illustrated by 6 plates and 12 text-figures.

ANATOMIE DES CLAUSILIES DANOISES, I, LES ORGANES GÉNITAUX. Par C. M. Steenberg (Mindeskript for Japetus Steenstrup, xxix, pp. 1-44, 1914). A well worked-out study, full of interest to workers in the anatomy of land snails.

THE PLIOCENE MOLLUSCA OF GREAT BRITAIN. By F. W. Harmer (Palaeontographical Society, 1913, pt. 1, pp. 1-200,